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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/594,587

04/22/2008

Norihiro Yamaguchi

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WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

MCKANE, ELIZABETH L

ART UNIT

PAPER NUMBER

1797

NOTIFICATION DATE

DELIVERY MODE

06/11/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentmail@whda.com

Office Action Summary	Application No. 10/594,587	Applicant(s) YAMAGUCHI ET AL.	
	Examiner ELIZABETH L. MCKANE	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-13,15-20 and 23-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-13,15-20 and 23-32 is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8 and 33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-6, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omatsu et al. (US 2001/0054374) in view of Antonoplos et al. (US 2002/0051733).

Omatsu et al. teaches an ink composition and detector for detecting hydrogen peroxide plasma sterilization (Abstract). The composition includes an anthraquinone dye (paragraph [0019]), a nitrogen-containing (amide) polymer (paragraph [0028]), and a cationic surfactant (paragraph [0024]). The cationic surfactant can be alkyltrimethylammonium salt (paragraph [0026]) and the composition may further include a cellulose resin binder and a silica extender. See Example 1. The nitrogen-containing polymer (amide) may be used as a binder in an amount of 5-35 wt.%. See paragraph [0031]. Omatsu et al. further discloses that the ink composition may include a coloring material which does not change color in the plasma sterilization atmosphere (paragraph [0023]). In use, Omatsu et al. teaches that the ink composition is applied as a layer to a support and may further include a non-color changing layer. See paragraphs [0034]-[0037]. Omatsu et al. does not disclose use of an azo dye. As to the intended use of the indicator being used for the detection of ozone gas, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

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Antonoplos et al. discloses a chemical indicator for oxidative (hydrogen peroxide) sterilants wherein the indicator dye is an azo dye (paragraph [0016]). The dye may be coated onto a paper or plastic substrate in use (para [0037], [0100]). It would have been obvious to one of ordinary skill in the art at the time of the invention to use the dye of Antonoplos et al. in combination with the dye of Omatsu et al., as Omatsu teaches that "dyes other than said anthraquinone dyes...may also be used concomitantly" (para [0023]) and since doing so would have provided redundancy for sterility assurance.

3. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Omatsu et al. in view of Barrett (US 5,955,025).

Omatsu et al. teaches an ink composition and detector for detecting hydrogen peroxide plasma sterilization (Abstract). The composition includes an anthraquinone dye (paragraph [0019]) and a cationic surfactant (paragraph [0024]). Omatsu et al. is silent with respect to use of a methine dye.

Barrett discloses a chemical indicator for a hydrogen peroxide sterilization process wherein a dye composition containing a cyanine dye is printed onto a substrate. See col.2, line 55; col.3, line 31; col.4, lines 61-63. As Barrett evidences that it was known in the art to use a cyanine (methane) dye as a hydrogen peroxide indicator, it would have been obvious to add a cyanine dye to the indicator of Omatsu et al., since Omatsu et al. teaches that "dyes other than said anthraquinone dyes as well as pigments may also be used concomitantly." See para [0023].

Allowable Subject Matter

4. Claims 9-13, 15-20, and 23-32 are allowed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH L. MCKANE whose telephone number is (571)272-1275. The examiner can normally be reached on Mon-Fri; 5:30 a.m. - 2:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Elizabeth L McKane/
Primary Examiner, Art Unit 1797

elm

7 June 2010